





UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Tradenark Officer "Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/091,156	03/04/2002	John G. Amery	BOEI-1-1035	6022	
7590 08/23/2004			EXAMINER		
Michael S. Smith			PIZIALI, JEFFREY J		
BLACK LOW 816 Second Av	E & GRAHAM PLLC	ART UNIT	PAPER NUMBER		
Seattle, WA 98104			2673	5	
			DATE MAILED: 08/23/2004	<b>.</b>	

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary		"	Application No.		Applicant(s)			
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Period fo	The MAILING DATE of this commun r Reply	ication appear	s on the cover sheet w	ith the c	orrespondence ac	ddress		
THE M - Exten after S - If the - If NO - Failur Any re	DRTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUNI sions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comm period for reply specified above is less than thirty (3 period for reply is specified above, the maximum state to reply within the set or extended period for reply eply received by the Office later than three months a d patent term adjustment. See 37 CFR 1.704(b).	ICATION. of 37 CFR 1.136(a) nunication. io) days, a reply with atutory period will ap will, by statute, cau	In no event, however, may a nin the statutory minimum of thin oply and will expire SIX (6) MON se the application to become Al	reply be tim rty (30) days NTHS from t BANDONED	ely filed will be considered time he mailing date of this co (35 U.S.C. § 133).	ly. communication.		
Status								
1) 又	Responsive to communication(s) file	ed on <i>01 June</i>	2004.					
	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.							
<i>'</i> =	<del>_</del>							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition	on of Claims							
5)□ 6)⊠ 7)□	Claim(s) 1-24 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  Claim(s) is/are allowed.  Claim(s) 1-24 is/are rejected.  Claim(s) is/are objected to.  Claim(s) is/are subject to restriction and/or election requirement.							
Application	on Papers							
10)[ 7	The specification is objected to by the The drawing(s) filed on <u>04 March 200</u> Applicant may not request that any objected Replacement drawing sheet(s) including The oath or declaration is objected to	$02$ is/are: a) $\Sigma$ ction to the draw the correction	wing(s) be held in abeyang is required if the drawing	nce. See (s) is obj	37 CFR 1.85(a). ected to. See 37 C	FR 1.121(d).		
Priority u	nder 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
2)  Notice 3) Inform	(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (P nation Disclosure Statement(s) (PTO-1449 or No(s)/Mail Date		4) Interview S Paper No( 5) Notice of I 6) Other:	s)/Mail Da Informal Pa		O-152)		

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Newly amended (see the Amendment filed 1 June 2004) independent claims 1, 11, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationship pertains to the claimed subject matter of a lens having a focal length positioned between the operator and the video display at a distance that is less than the focal length of the lens. Specifically, the claimed limitation of the lens' positioned distance is structurally incomplete, so far as no explicit point of reference has been provided for measuring said distance to the lens. It would remain unclear to one skilled in the art what the distance from the lens is being measured to: Is the distance from the lens measured to the operator, to the video display, or to some other reference point (another lens, for instance)? There is no sure way of knowing from present claim language.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Teitel (US 5,999,147).

Regarding claim 1, Teitel discloses a visual display system for producing a display image perceived as a far-focused virtual image by an operator, the display system comprising: a video image generation system including an image generator for generating a video signal (see Column 3, Lines 43-63); a video display [Fig. 5; 20], operatively connected to the image generator, for displaying a video image based on the generated video signal; and a lens [Fig. 5; 32] having a focal length positioned between the operator [Fig. 5; 42] and the video display at a distance that is less than the focal length of the lens (see Fig. 2; Column 4, Lines 31-58), wherein the operator perceives through the lens the displayed image as a far-focused virtual image [Fig. 5; 62] (see Column 5, Line 54 - Column 6, Line 65).

Regarding claim 2, Teitel discloses the lens is a positive aspheric lens (see Column 6, Lines 33-44).

Regarding claim 3, Teitel discloses the positive aspheric lens is a Fresnel type lens (see Column 6, Lines 54-65).

Regarding claim 4, Teitel discloses the lens is an achromatic lens (see Column 6, Line 66 - Column 7, Line 14).

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Regarding claim 5, Teitel discloses the achromatic lens is a Fresnel type lens with color separation correction (see Column 6, Line 54 - Column 7, Line 14).

Regarding claim 6, Teitel discloses the lens has an associated focal length designed such that the displayed image viewed through the lens appears at a predetermined distance (see Column 6, Lines 1-32).

Regarding claim 7, Teitel discloses the lens includes a planar surface (see Fig. 5).

Regarding claim 8, Teitel discloses the lens is oriented substantially parallel to the video display and substantially perpendicular to a line extending from the operator's viewpoint (see Fig. 5).

Regarding claim 9, Teitel discloses the lens is one or more optical elements for producing a substantially distortion-free, collimated image (see Column 6, Lines 33-65).

Regarding claim 10, Teitel discloses the video display includes a flat-panel display (see Column 3, Lines 25-36).

Regarding claim 11, this claim is rejected by the reasoning applied in the above rejection of claim 1.

Regarding claim 12, this claim is rejected by the reasoning applied in the above rejection of claim 6.

Regarding claim 13, this claim is rejected by the reasoning applied in the above rejection of claim 7.

Regarding claim 14, this claim is rejected by the reasoning applied in the above rejection of claim 8.

Regarding claim 15, this claim is rejected by the reasoning applied in the above rejection of claim 2.

Regarding claim 16, this claim is rejected by the reasoning applied in the above rejection of claim 3.

Regarding claim 17, this claim is rejected by the reasoning applied in the above rejection of claim 4.

Regarding claim 18, this claim is rejected by the reasoning applied in the above rejection of claim 5.

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Regarding claim 19, this claim is rejected by the reasoning applied in the above rejection of claim 9.

Regarding claim 20, this claim is rejected by the reasoning applied in the above rejection of claim 10.

Regarding claim 21, this claim is rejected by the reasoning applied in the above rejection of claims 1, 4, 6, and 7.

Regarding claim 22, this claim is rejected by the reasoning applied in the above rejection of claim 8.

Regarding claim 23, this claim is rejected by the reasoning applied in the above rejection of claim 5.

Regarding claim 24, this claim is rejected by the reasoning applied in the above rejection of claim 10.

# Response to Arguments

5. Applicants' arguments filed 1 June 2004 have been fully considered but they are not persuasive. The applicants contend the cited prior art of Teitel (US 5,999,147) neglects to disclose a lens having a focal length positioned between the operator and the video display at a

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distance that is less than the focal length of the lens. The examiner must respectfully disagree. Teitel explicitly teaches a lens [Fig. 5, 32 and Fig. 2, 30 & 32] having a focal length ("about 30mm" -- see Column 5, Line 47) positioned between the operator [Fig. 5; 42] and the video display [Fig. 5; 20] at a distance ("the two lenses are separated by a distance of 2-3mm" -- see Fig. 2; Column 4, Lines 31-58) that is less than the focal length of the lens, wherein the operator perceives through the lens the displayed image as a far-focused virtual image [Fig. 5; 62] (see Column 5, Line 54 - Column 6, Line 65). Moreover, Teitel's lens would inherently by positioned at a distance to the operator less than the lens' focal length whenever the operator merely leans forward close enough to the lens (for instance, for the purpose of inspecting the lens for dust accumulation, or alternately, simply wiping the lens clean with a thumb).

By such reasoning, rejection of the claims is deemed necessary, proper, and thereby maintained at this time.

#### Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

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final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jeff Piziali whose telephone number is (703) 305-8382. The

examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

19 August 2004

BIPIN SHALWALA SUPERVISORY PATENT EXAMINER

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